KENTUCKY ROUTE 49 BRIDGE
Spanning the Rolling Fork River
Bradfordsville
Marion County
Kentucky

HAER No. KY-17

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
Southeast Region
National Park Service
Department of the Interior
Atlanta, Georgia 30303

HISTORIC AMERICAN ENGINEERING RECORD

Kentucky Route 49 Bridge

HAER No. KY-17

Location:	Spanning the Rolling Fork River Bradfordsville, Marion County, Kentucky UTM: 16.660300.4151950 Quad: Bradfordsville
Date of Construction:	1881
Builder/Designer:	King Bridge Company of Cleveland, Ohio
Present Owner:	Kentucky Transportation Cabinet State Office Building Frankfort, Kentucky
Present Use:	Vehicular bridge
Significance:	In January 1982, there were six Whipple-Murphy trusses in the State. The Kentucky Route 49 Bridge is the oldest Whipple-Murphy bridge in Kentucky.
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Edited and Transmitted by:	Jean P. Yearby, HAER, 1987

The Kentucky Route 49 Bridge, located in Marion County over Rolling Fork in the central part of the State, was determined eligible to the National Register of Historic Places on September 30, 1982. It is a Whipple-Murphy or double-intersection Pratt through truss, built in 1881 by the King Bridge Company of Cleveland, Ohio. Route 49 crosses the Rolling Fork River by way of the Kentucky Route 49 Bridge in a rural pastoral setting. Due to bridge deterioration, a posted load limit of 13 tons has been imposed.

The bridge is 158 feet in length and 15.7 feet in width. The substructure is rough cut stone abutments. Materials in the superstructure are probably wrought iron rather than steel because of the pre-1885 construction date.

The Whipple-Murphy or double-intersection Pratt truss uses the basic form of a Pratt through truss but has lengthened diagonals and counters that extend across two panels. This bridge type was first patented by Squire Whipple in 1847 and later improved by John W. Murphy and J. H. Linville. Web members of the bridge are built of standard sections as follows: end posts and top chords are two channels, cover plate, stay bars; bottom chords are two and four rectilinear die-forged eyebars; hip-verticals are single round rods with stirrup ends (added); intermediate posts are two channels with lacing bars. Diagonals with two rectilinear die-forged eyebars or single round eyebars with sleevenuts. Counters are single round loop-welded eyebars with sleevenuts. Top and bottom lateral bracing are single round rods with sleevenuts. Top lateral struts are two small channels with lacing bars.

The floor system has rolled I-beam floor beams and floor beam hangers. Stringers are also rolled I-beams and the deck is wood planking.

The "Survey of Truss, Suspension and Arch Bridges in Kentucky," completed in January 1982, located six Whipple-Murphy trusses in the State. All six examples are pin-connected. The earliest example is dated 1881 and the remainder apparently date before or near the turn of the century. The range in length for these structures is from 105 to 209 feet.

Although in poor physical condition, the Kentucky Route 49 Bridge retains its structural integrity. As the oldest example of a Whipple-Murphy truss, it is eligible for listing on the National Register as a valuable historic resource.